

## Allison.ST25

## SEQUENCE LISTING

<110> Board of Trustees Operating Michigan State University  
Allison, Richard

<120> Expression of Recombinant Transgene

<130> 6550-000072

<150> US 60/485073

<151> 2003-07-03

<160> 15

<170> PatentIn version 3.2

<210> 1

<211> 26

<212> DNA

<213> Cowpea chlorotic mottle virus

<400> 1

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26

<210> 2

<211> 16

<212> DNA

<213> Cowpea chlorotic mottle virus

<400> 2

actccaaaga gttctt

16

<210> 3

<211> 835

<212> DNA

<213> Cauliflower mosaic virus

<400> 3

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ccaagaaggt taaagatgca gtcaaaagat tcaggactaa ctgcatcaag aacacagaga 180  
aagatatatt tctcaagatc agaagtacta ttccagtatg gacgattcaa ggcttgcttc 240  
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aggccatgga gtcaaagatt caaatagagg acctaacaga actcgccgta aagactggcg 360  
aacagttcat acagagtctc ttacgactca atgacaagaa gaaaatcttc gtcaacatgg 420  
tgagacacga cacacttgtc tactccaaaa atatcaaaga tacagtctca gaagacaaaa 480  
gggcaattga gacttttcaa caaagggtaa tatccggaaa cctcctcgga ttccattgcc 540  
cagctatctg tcactttatt gtgaagatag tggaaaagga aggtggctcc taaaaatgcc 600  
atcattgcga taaaggaaag gccatcgttg aagatgcctc tgccgacagt ggtcccaaag 660  
atggaccccc acccacgagg agcatcgtag aaaaagaaga cggtccaacc acgtcttcaa 720  
1

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agcaagtgga ttgatgtgat atctccactg acgtaagggg tgacgcacaa tcccactatc 780  
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 <212> DNA  
 <213> Encephalomyocarditis virus

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 gggcccggaa acctggccct gtcttcttga cgagcattcc taggggtctt tcccctctcg 180  
 ccaaaggaat gcaaggctctg ttgaatgtcg tgaaggaagc agttcctctg gaagcttctt 240  
 gaagacaaac aacgtctgta gcgacccttt gcaggcagcg gaacccccca cctggcgaca 300  
 ggtgcctctg cggccaaaag ccacgtgtat aagatacacc tgcaaaggcg gcacaacccc 360  
 agtgccacgt tgtgagttgg atagttgtgg aaagagtcaa atggctctcc tcaagcgtat 420  
 tcaacaaggg gctgaaggat gcccagaagg taccctattg tatgggatct gatctggggc 480  
 ctcggtgcac atgctttaca tgtgttttagt cgagggttaa aaaacgtcta ggccccccga 540  
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<210> 5  
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 <212> RNA  
 <213> Encephalomyocarditis virus

<400> 5  
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 gggcccggaa accuggcccu gucuucuuga cgagcauucc uaggggucuu uccccucucg 180  
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 ggugccucug cggccaaaag ccacguguau aagauacacc ugcaaaggcg gcacaacccc 360  
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 ucaacaaggg gcugaaggau gcccagaagg uaccccauug uaugggaucu gaucuggggc 480  
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<210> 6  
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 <212> DNA

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&lt;213&gt; Encephalomyocarditis virus

&lt;400&gt; 6

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acaatggggg accttctggg catccttcag ccccttggtg aatacgcttg aggagagcca	180
tttgactctt tccacaacta tccaactcac aacgtggcac tgggggttg cgcctttgc	240
aggtgtatct tatacacgtg gcttttggcc gcagaggcac ctgtcgccag gtgggggggtt	300
ccgctgcctg caaagggctg ctacagacgt tgtttgtctt caagaagctt ccagaggaac	360
tgcttccttc acgacattca acagaccttg cattcctttg gcgagagggg aaagaccctt	420
aggaatgctc gtcaagaaga cagggccagg tttccgggcc ctcacattgc caaaagacgg	480
caatatggtg gaaaatcaca tatagacaaa cgcacaccgg cttattcca agcggcttcg	540
gccagtaacg ttagggggggg gggagggaga ggggcggaat t	581

&lt;210&gt; 7

&lt;211&gt; 581

&lt;212&gt; RNA

&lt;213&gt; Encephalomyocarditis virus

&lt;400&gt; 7

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acaauggggg accuucuggg cauccuucag ccccuuguug aaucgcuug aggagagcca	180
uuugacucuu uccacaacua uccaacucac aacguggcac uggggguugug ccgccuuugc	240
agguguaucu uauacacgug gcuuuuggcc gcagaggcac cugucgccag guggggggguu	300
ccgcugccug caaagggucg cuacagacgu uguuugucuu caagaagcuu ccagaggaac	360
ugcuuccuuc acgacauuca acagaccuug cauuccuuug gcgagagggg aaagaccccu	420
aggaaugcuc gucaagaaga cagggccagg uuuccgggcc cucacauugc caaaagacgg	480
caauauggug gaaaucaca uauagacaaa cgcacaccgg ccuuauucca agcggcuucg	540
gccaguaacg uuagggggggg gggagggaga ggggcggaau u	581

&lt;210&gt; 8

&lt;211&gt; 242

&lt;212&gt; DNA

&lt;213&gt; Cowpea chlorotic mottle virus

&lt;400&gt; 8

agtgcccgct gaagagcgtt acactagtgt ggcctacttg aaggctagtt ataaccgttt	60
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ggttttactc cttgaaccct tcggaagaac tctttggagt tcgtaccagt acctcacata	180

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cc 242

<210> 9  
<211> 242  
<212> RNA  
<213> Cowpea chlorotic mottle virus

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cuuuuaacgg uaaucguugu ugaaacgucu uccuuuuaca agaggauuga gcugcccuug 120  
gguuuuacuc cuugaacccu ucggaagaac ucuuuggagu ucguaccagu accucacaua 180  
gugagguaau aagacuggug ggcagcgcgu agucgaaaga cuaggugauc ucuaaggaga 240  
cc 242

<210> 10  
<211> 242  
<212> DNA  
<213> Cowpea chlorotic mottle virus

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cccaagggca gctcaatcct cttgtaaaag gaagacgttt caacaacgat taccgtttta 180  
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ct 242

<210> 11  
<211> 242  
<212> RNA  
<213> Cowpea chlorotic mottle virus

<400> 11  
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cccaagggca gcucaauccu cuuguaaaag gaagacguuu caacaacgau uaccguuuua 180  
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cu 242

<210> 12  
<211> 12  
<212> DNA  
<213> Artificial

<220>  
<223> artificial sequence used to show antisense relationship of a gen

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and IRES to a promoter and viral 3' UTR

<220>  
<221> misc\_feature  
<222> (1)..(3)  
<223> n is a, c, g, or t

<400> 12  
nnncatggaa tt

12

<210> 13  
<211> 12  
<212> DNA  
<213> Artificial

<220>  
<223> complement of artificial sequence used to show antisense  
relationship of a gene and IRES to a promoter and viral 3' UTR

<220>  
<221> misc\_feature  
<222> (10)..(12)  
<223> n is a, c, g, or t

<400> 13  
aattccatgn nn

12

<210> 14  
<211> 12  
<212> RNA  
<213> Artificial

<220>  
<223> Transcript of RNA polymerase

<220>  
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<222> (1)..(3)  
<223> n is a, c, g, or u

<400> 14  
nnncauggaa uu

12

<210> 15  
<211> 12  
<212> RNA  
<213> artificial

<220>  
<223> complement of transcript of RNA polymerase

<220>  
<221> misc\_feature  
<222> (10)..(12)  
<223> n is a, c, g, or u

<400> 15  
aaauccaugn nn

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12